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குடிபுறங் காத்தோம்பிக் குற்றம் கடிதல்
வடுஅன்று வேந்தன் தொழில்

- Kural 549

Meaning:

A fearless ruler is duty bound to protect society from external harm and internal crime, with a strong arm

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KALAKAD MUNDANTHURAI TIGER RESERVE

Nestled beneath the majestic grandeur of Western Ghats, Southerly edge, the Kalakad Mundanthurai Tiger Reserve lies. Within its limits one can meet some of India's highest mountains peaks plain land plateau, warm valleys, streamy impenetrable rain forests, lush green meadows, reed brakes, Tahr-trodden cliffs, eagle hovering crags, honey dripping ledges, owl hooting rock faces, ripping rivulet murmuring brooks, thundering waterfalls and tumultuous torrents winding through precipitous gorges of terrifying aspect. An area of such a diverse contrast shelters unique fauna, the Tiger which has been occupying the apex position of biological pyramid.

KALAKAD MUNDANTHURAI TIGER RESERVE is located in Tirunelveli & Kanniyakumari Districts, Tamil Nadu: Between 8°.25' N and 8°.53'N and Latitudes and Between 77°.10' E and 77°.35' E Longitudes. Kalakad Mundanthurai Tiger Reserve has 895 sq.km core area and 35.28 sq.km buffer area of Nellai Wildlife Sanctuary in the North, 201.36 sq.km of buffer zone area of Kanniyakumari Wildlife Sanctuary and 469.90 sq.km of Eco Development Zone on the eastern front consisting of non forest areas. The total extent of Kalakad Mundanthurai Tiger Reserve is 1,601.542 sq.km.

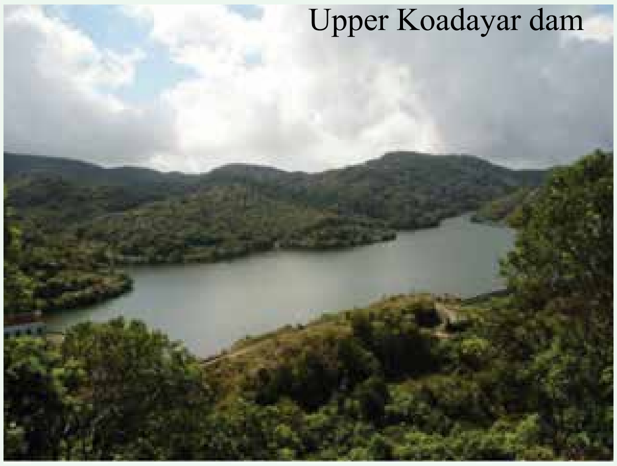
HISTORY: Kalakad Mundanthurai Tiger Reserve formed by combining the two sanctuaries of Kalakad and Mundanthurai in 1988 and has a history of five decades. Mundanthurai Wildlife Sanctuary was declared as the Nation's first Tiger sanctuary in 1962 under the Wild Birds and Animal Protection Act 1912 primarily for the conservation of Tiger much before the focus of Tiger, since the Project Tiger was launched only in 1973. Kalakad Wildlife Sanctuary was established in 1976 primarily to give protection to the endangered lion-tailed macaque.

Kalakad Mundanthurai Tiger Reserve supporting a rich array of floral and faunal diversity with its undulated topography has significant values.

Karaiyar Dam

Kodumudiyar dam

Kadanandathi Dam

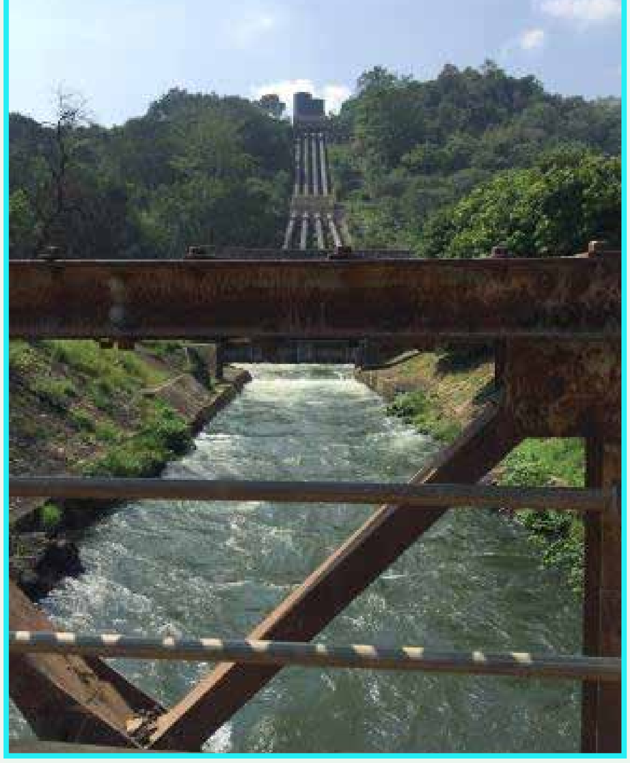

Upper Koadayar dam

Dams & Reservoirs: The reserve is also known as the "River Sanctuary" with as many as 14 rivers originating from this Tiger Reserve. The rivers flow into three major water sheds namely Upper Kodayar, Manimuthar and Thamirabarani receives around 5000 mm of rainfall which serves as the main water catchment area for the natural water sources for 4 Districts namely, Tirunelveli, Thoothukudi, Kanniyakumari and Virudhunagar. Civilizations in the classic historical period were also said to be dependent on the perennial Thamirabarani River. Thus the reserve hosts 11 dams as its natural water catering resource namely Servalar, Papanasam Upper and lower dam, Manimuthar, Kadananathi, Ramanathi, Netteriankal, Vadakkupachaiyar, etc.

Agriculture: Agriculture is the main profession in the buffer area of Kalakad Mundanthurai Tiger Reserve. All the watersheds from where the rivers originating and irrigating the lands in the buffer area are from the Kalakad-Mundanthurai Tiger Reserve. Approximately 1,71,526 ha. of agricultural land is being irrigated by the rivers in the Districts of Tirunelveli, Thoothukudi and Kanniyakumari. The irrigation is mainly for the cultivation of paddy which is the livelihood of the people, thus the water bodies serving as the economic backbone for agriculture and livelihood.

It is noteworthy that during the heavy drought prevailed in Tirunelveli, Thoothukudi, Kanniyakumari and Virudhunagar Districts from the years 2011-2012 to 2013-2014, river Thamirabarani originates from Kalakad Mundanthurai Tiger Reserve, served as the

Hydel project Papanasam



elixir of life of the people thriving throughout the year. This has been the major theme for the enhanced active people participation in conserving the Biodiversity of the reserve. This is the only perennial river in the State of Tamil Nadu flowing water throughout the year hence it is called as *'Vattratha Jeevanathi'*.

Hydel Projects: Besides agriculture, one of the major economic usages of the water is for three hydro electrical power stations in the Tiger reserve. Around 48 MW of electricity is generated from the hydel power stations of Servalar and Papanasam.

BIOLOGICAL VALUES

Global Hotspot of Biodiversity: Kalakad Mundanthurai Tiger Reserve forms a part of the Western Ghats, which is recognized as one of the three mega centers of endemism in India and as one of the 35 Global Hot Spots of biodiversity. Kalakad Mundanthurai Tiger Reserve forming part of the southern Western Ghats includes part of the Agasthiarmalai Biosphere Reserve which is recognized as one of the five important centers of Plant species diversity and endemism in India. Kalakad Mundanthurai Tiger Reserve within Western Ghats is a Super Hot Spot of Biodiversity which is a suitable habitat for Tigers as it naturally composed of moist and dry deciduous forests and grassland at lower and higher altitudes, provide food and shelter to several herbaceous animals, which form tiger's prey. The Department has done considerable work in developing habitat management for Food, Shelter and Water. The Kalakad-Mundanthurai plateau is a richest region in flora representing various types of forests. The gradual transition of forest types plays an important role in wildlife and gives food and shelter for living and breeding.

Floral significance: Kalakad Mundanthurai Tiger Reserve, owing to its wide variation in the topographical, geo-morphological, edaphic and climatic features, supports forests of various floristic compositions. The vegetation

type varies from thorny shrub jungle to lush evergreen forests and montane grass lands. 11 major forest types are present in the reserve out of which the Tirunelveli semi evergreen forests are unique to the area.

Kalakad Mundanthurai Tiger Reserve bears a large contiguous tract of around 400 sq.km. of wet evergreen forests, located away from the equatorial region. This Tiger reserve and its environs which are floristically rich with genetically diverse population of species, abound in economically and medicinally important plants as well. As many as 448 endemic species of angiosperms have been identified from this region.

Rich array of faunal assemblage: Tiger occupies the apex position in the biological pyramid and is the identified as the keystone species in Kalakad Mundanthurai Tiger Reserve. Camera trapping has resulted in the phototrapping of 14 unique tigers in this area which divulges the estimated tiger population to be 16-18. Other than tigers the tiger reserve also supports a large number of mammalian fauna. All the 5 primates of Peninsular India are found in Kalakad Mundanthurai Tiger Reserve. All the 14 endemic mammals of Western Ghats are found in Kalakad Mundanthurai Tiger Reserve (Lion Tailed Macaque (Macaca silenus), Nilgiri Langur (Presbytis johnii), Nilgiri Marten (Martes gwatkinsiisp) and Nilgiri Tahr (Hemitragus hylocrius) etc). All the 19 endemic birds of Western Ghats are in Tamil Nadu and out of this, 15 are found in Kalakad Mundanthurai Tiger Reserve viz., Nilgiri Pipit *(Anthus nilghiriensis)*, Travancore White Breasted Laughing Thrush *(Garrulax jerdoni)*, Grey Headed Bulbul *(Pycnonotus priocephalus)*, Blue Winged Parakeet *(Psittacula columboides)*, Nilgiri Wood Pigeon *(Columba elphinstonii* etc. The reserve has a very diverse fish fauna including 32 species; butterfly fauna with rare species such as Spot Puffin *(Appias lalage)*. Herpetofaunal assemblage is high with many endemic and rare species such as Dasia haliana, Calotes andamanensis and the Black Microhylid Frog, *Melanobatrachus indicus*. The reserve harbours 32 species of endemic reptiles that constitute 16% of the Western Ghats element. Amphibian's diversity is also

very rich in the reserve harbouring around 22 endemics.

Religious values & Cultural values: Kalakad Mundanthurai Tiger Reserve houses quite a number of religious places like *Gorakanathar* Temple with Dharga beside the temple. Among these, two main places of religious importance viz., Sorimuthu Ayyanar Koil on the Mundanthurai plateau, and Nambi Kovil in the Thirukurungudi foothills. These places are visited by a large number of pilgrims that has already impinged on the biological values of the reserve.

Tourism and aesthetic values: Due to the rugged terrain and inaccessibility, only about 35 sq.km. is earmarked at eastern foothills side of the reserve for tourism purpose. The enjoyment of scenic beauty here is at sky's limit. The rich Bio-diversity of the Reserve stimulates a true nature loving tourist to visit this park again and again.

There are three important waterfalls in Kalakad Mundanthurai Tiger Reserve. They are *Banatheertham* falls (currently banned for tourist visit) near *Karaiyar* Dam considered a sacred water falls (Perennial Waterfall where the *Thamirabarani* River meets the *Karaiyar* Dam, however visit to this falls has now been prohibited as per the Supreme court order), *Agasthiyar* falls (where the *Thamirabarani* River enters the plains; unlike Courtalam falls, water is available in *Agasthiyar* falls throughout the year), *Manimuthar* falls and Kalakad Thalayanai. Karaiyar Dam and Servalar Dam in Mundanthurai Range, Kadananathi Dam in Kadayam Range attract lot of tourists. The falls, dams, Reservoirs and other water bodies attract large number of pilgrims, National and International tourists.

Human values: The only inhabitants of the Ghats are the Kanis. They are also called *'malaiarasans'* and are supposed to be the oldest race in the division having been driven into the hills by the first invaders of the plains. Their settlements, called 'vadis' consist of huts, made of reed, grass and small timber, and are situated strategically away from the haunts of men or animals. Surrounding these dwellings are the patches of land they cultivate. Many of them have been employed by the Forest Department as Forest Guards, Forest Watchers and Anti-poaching watchers. They are of great use to the working plans party, their expert identification of the commoner evergreen species, as well as their unrivalled knowledge of the forest being invaluable.

CONSERVATION MEASURES

The general objective of Management of Kalakad Mundanthurai Tiger Reserve is the Conservation of Bio-diversity in all its aspects through the length and breadth of the Tiger Reserve through complete preservation of its undisturbed forests an through restoration process in those parts of forests which are prone to biotic interference and to preserve the integrity of basic ecological, floral, faunal, hydrological, geological and natural characteristics of the Reserve for the purpose of protecting, propagating and developing wildlife and its environment for all times to come. Conservation of Bio-diversity of Kalakad Mundanthurai Tiger Reserve in all its aspects through the length and breadth of the Reserve is achieved through the "People's Participation" of the fringe villages through Eco – Development approach started in 1994 through the World Bank assisted project called FREEP (Forest Education and Extension Project)

For effective and efficient protection of Flora and Fauna the following measures have been taken in Kalakad Mundanthurai Tiger Reserve. It was equally focused that the local people were made aware of the Reserve, and the ultimate benefits that accrued to the region as a whole.

Engaging Anti poaching watchers: 110 nos. of Anti poaching watchers have been engaged to undertake intensive raid which resulted in total banning of poaching activities. Further their visit to interior Forests paves way for detecting fire and controlling movement of antisocial elements inside the Forests. Frequent raid by Anti poaching watchers, special parties and surprise raids are of great threat to the people who indulge in Ganja cultivation and other offences in Interior Forest Areas.

Fire Protection: Effective monitoring is being done over fire in Forest Area. During January to June fire season report has been obtained every 3 hours and closely monitored and fire fighting personnel with fire protection materials are sent as and when message regarding fire is received to put out the fire. Publicity boards had been erected to create awareness among people to protect the forests from fire.

MAN-ANIMAL CONFLICT

Almost the entire eastern periphery and the villages adjoining this area are vulnerable for conflict with wild animals. The peripheral villages mostly practice rained agriculture

which is the most important source of livelihood. The Man – Animal conflicts are mainly due to crop damages by Wild Elephants, Wild pigs and other herbivores. To reduce this situation, solar power electric fence along the eastern boundary of the Tiger Reserve has been erected. Wherever possible Elephant Proof Trenches are being dug to restrict the Wild Elephants as well as animals such as Wild pigs inside the forests. Human death and Human Injury by wild animals is very meagre in this Tiger Reserve. Compensation for Human death, Human Injury, crop, livestock and property damages caused by wild animals are being paid on receipt of records in full shape as per availability of funds.

Habitat Management: Kalakad Mundanthurai Tiger Reserve, though aimed at conserving tigers, is managing and conserving entire landscape along with its floral and faunal population. The habitat is conserved and improved by undertaking the following management activities.

- Waterhole management
- Removal of invasive alien species
- Species specific habitat management
- Preventing of polythene and other hazardous materials
- Restoration of degraded areas.

ECO DEVELOPMENT:

A pioneering attempt aimed at conservation of biodiversity through improved park management to reduce the forest dependency and to create sustenance and even livelihood through eco-development was initiated during 1994 in Kalakad Mundanthurai Tiger Reserve as a pilot project named Forestry Research Education and Extension Project (FREEP) involving local people. The unique approach met the objectives to reduce forest dependency, creating awareness on forest protection & conservation and enhancing capacity of the local people for self sustained livelihood through financial assistance.

- Biomass generation
- Alternative income generation
- Energy conservation.

CORRIDOR

The Kalakad Mundanthurai Tiger Reserve and Periyar Tiger Reserve (Kerala State) constitute the Southern most Tiger ranges of the Western Ghats bio-diversity hotspot in Southern India, making them high priority areas for global bio-diversity conservation effort which contains two main complexes of protected areas, Periyar (Consisting of Periyar tiger Reserve and Srivilliputhur Wildlife Sanctuary) to the north and Agasthiyar malai (Consisting of Kalakad Mundanthurai Tiger Reserve and Shendurney,

Peppara and Neyyar Wildlife Sanctuaries) to the South. Once contiguous, they are now separated by the Shencottah gap, 450 sq.km. in extent with a mosaic of degraded forests, plantations and human settlements. The three major linear barriers in this region are National Highways, the Punalur - Shencottah Railway line and 400 kv powerline. Their physical characteristics inhibit large mammal movement and they serve as focal areas for human activity. As a result the increasingly isolated population of Tigers in this Tiger Reserve is vulnerable to demographic stochasticity and inbreeding, threatening the long term existence of not only Tigers but also other landscape species like elephants etc., in this landscape as a whole. Thus the long term viability of Tigers in the Southern Western Ghats critically depends upon increasing connectivity between Kalakad Mundanthurai Tiger Reserve and Periyar Tiger Reserve.

BIO-DIVERSITY CONSERVATION AND RURAL LIVELIHOOD IMPROVEMENT PROJECT IN FIELD LEARNING CENTRE

NTCA felicitated Kalakad Mundanthurai Tiger Reserve with an “Award for Excellence” for the year 2010-2011 in the category of “Co-existence and Buffer Management”. Considering the successful implementation of the Eco Development project in Kalakad Mundanthurai Tiger Reserve, the World Bank had recommended Kalakad Mundanthurai Tiger Reserve as a Field Learning Centre (FLC) under the BCRLI Project.

AGASTHIYARMALAI LANDSCAPE

The Tamil Nadu Part of Agasthiyarmalai Landscape is registered under Kalakad Mundanthurai Tiger Conservation Foundation. The Project duration is from the financial year 2014-2015 to 2017-2018. The rich Bio-Diversity and endemism found in this Landscape has prompted the introduction of this conservation project. The Landscape project covers Kanniyakumari Wild Life Sanctuary, Kalakad Mundanthurai Tiger Reserve, Tirunelveli Wild Life Sanctuary, Srivilliputhur Grizzled Squirrel Wildlife Sanctuary, Megamalai Wild Life Sanctuary and Theni Forest Division. Out of the four major components of the project, component 3 supports for scaling up of successful model of landscape conservation to additional areas under which the Agasthiyarmalai Landscape (Tamil Nadu Part) falls. Kalakad Mundanthurai Tiger Reserve has already been identified as a successful Field Learning Centre under the component 2 of the project providing support to improved knowledge and capacity development on learning and experience from the local conservation model. The Agasthiyarmalai Landscape Project is the Third project in Kalakad Mundanthurai Tiger Reserve after the successful implementation of Eco Development Project (FREEP) and successful establishment of Field Learning Centre under the Biodiversity Conservation and Rural Livelihood Improvement Project.

Courtesy: ***Forest Department***

TRADITIONAL DANCES AND MUSIC OF TAMIL NADU

Tamil Nadu is endowed with a great cultural heritage with rare types of stylized forms of indigenous dances and music which have preserved their pristine purity and grace through several centuries. The Soul of India lies in its villages and the soul of her Art in her ancient folk forms of Arts. The process of evolution of these Folk Forms owes itself to the vocation of the people. The village folk in Tamil Nadu are mainly engaged in agriculture which involves much physical labour and strain. The various phases of agriculture have their seasons. As the arts of the village folk are inter-twined with their vocation, their forms of art also changes along with the phases of agriculture.

Thus the calm and serene folk music, which predominates from the time of ploughing the fields, gives place to folk dances performed in ecstasy after the harvest.

Folk Music—In the villages, music rings alongside with the work of the people. Tunes spring from their toil. Flow of music synchronises with the sowing of seeds. Music at the plough! Music at the fields! Music at the Canal Bunds! Music while rearing the crops! Music while harvesting the produce! Music while thrashing the grains! Thus the whole village life reverberates with music.

One of the popular forms of folk music is *Villuppattu*. Six to eight singers use a long bow-like instrument with tinkling of bells attached to the thick string of the bow. A mud pot gently beaten in the mouth by a leather piece and an *Udukku* are also used. The themes centre around the meritorious deeds of Gods and Goddesses, heroes and heroines. *Katta Bomman* is another favourite theme of this folk song. The leader of the group will narrate the song stage by stage and the rest will punctuate it by repetition.

Kaichilambu is a sort of folk *Katha Kalakshepam* to the tune of music and musically sounding *silambus*. Group dancing also is done to the tune of this music.

There are other kinds of popular folk music like Harvest Songs. etc.

Folk dances can be grouped under three major heads for convenient study: (1) Dances by professional troupes; (2) Community Dances among all sections of people during social and religions festivities; and (3) tribal dances of the hills and forests.

Dances By Professional Troupes

Among the folk dances of professional troupes, *Karagam, Kavadi, Puravi Attam* or Dummy Horse Dance, *Therukoothu* (Folk Play) and *Bommalattam* (puppet show) are the most prevalent popular varieties.

Karagam or dancing with a decorated pot or vessel on the head of the artiste to the accompaniment of *Nagaswaram* Music is a Folk Art popular in Tamilnadu. It is danced mostly for propitiating Mariamman and other village deities to get rains and to ward off epidemics.

The *Kavadi* is a well-known type of folk dance. Most of the devotees of Lord Muruga take to it as a devotional offering to the Almighty. The *Kavadi* is an arched wood and cloth work. The short wooden base rod held on the neck of the dancer is swung by him round and round according to his dance movements. Some professional experts display amazing feets of skill in it by balancing and moving the *Kavadi* all over the body and in various poses without the support of the hands. The dance is performed according to the varied tunes of the popular tune called *'Kavadi Chindu'*. The orchestra is *Naiyandi Melam* consisting of two *Nagaswarams*, two *Thavils*, *Pambai* and

Thamuku. *Urumi* and *Thalam* are some other instruments that are used in *Naiyandi Melam.*

Naiyandi Melam is an orchestra of instruments as described above. By itself it can give a concert and it is used as accompaniment also in *Karagam, Kavadi*, Dummy Horse Dance and other Folk Dances. The peculiarity of it is that the instrumentalists too dance while playing their instruments.

In the *Puravi Attam* the dummy horse is made with bamboo framework covered over with thick paper or cardboard. It is so lavishly decorated as to resemble a well-bred palace-horse or war horse. Through a hole on the back of the horse, the dancer stands, with the upper portion of his body above the waist being visible and with his legs fitted up with short wooden stilts. In this mode, he appears as if riding on the horse and he dances to the tune of the folk orchestra referred to above. Both man and woman as a couple join together and perform this horse dance. Normally a historical incident is narrated in the song and the performers dance to the beating of drums and playing of other instruments. In Tamil Nadu, this dummy horse dance is an inevitable item of performance in all temple festivals, village functions and other social gatherings.

In the Bommalattam, the characters of a drama are represented by decorated dolls and their movements are manipulated by black strings held by experienced craftsmen standing behind a short screen. Scenes from puranic dramas like *Harischandra, Rukmangada*, etc., are generally depicted. The music is not only of a high order approaching the classical mode but also very appealing. The acting of the dolls appear almost human and they are made to dance *Bharatha Natya* items too like *Alarippu*,

Jathiswaram and *Thillana*. The puppets are sizeable and the music is refined.

In Peacock Dance the dancer wears the mask of a peacock and also its feathers and dances to the tune of music, imitative of the movement and gait of the peacock. This dance is generally performed as an interlude in *Karagam* and *Kavadi* dances. Now-a-days, this

dance is performed by Bharatha Natya dancers in their programmes.

Beating of Drums (*Thappattam*)

Danced to the beating of drums, this dance is an inseparable item of village entertainment and at social gatherings. The processions, festivals and household ceremonies essentially go with this musical dance. Each group has 15 members. Villagers of all age groups take part in this dance.

The rhythmic beatings of *'Thappu'* kindles the feelings of the listeners and instinctively they are inspired to dance to the tunes of the drums.

Stick Dance (*Kolattam*)

This particular dance is also singular to Tamil Nadu. Both men and women without any age restriction take part in this group dance. They carry small sticks *(Koles)* in their hands which are about a foot and a half in length and strike them against each other's to suit the song and music. The songs are not merely entertaining but carry a theme and a message to the listeners. This group activity exercises the body of the performer and rejuvenates their mind, too.

Kolattam with some alterations is also popular in other parts of the country. However, the *Kolattam* of Tamil Nadu is a class by itself.

Kummi

This is an exclusive domain of women performing in groups. Ideas and thoughts are set to music and sung along with the body movement of the performers.

As in *Kolattam*, *Kummi* also gives a healthy exercise to the body and mind of the partakers. The rendering of the 'Kummi' songs

captivates the mind of the on-looker. *Kummi* is the most popular item of folk arts of Tamils. There are also *Kummi* songs which give rise to subline thoughts.

Oyilattam

Oyilattam is also a form of folk arts seen commonly in villages. Again it is also performed mainly by women. *Oyilattam* is an inseparable item of dance during village

festivals. Generally the *Marava* and *Nayakar* sects perform this group dance. Today this *'Oyilattam'* is perfomed not only in village festivals but also in general in social functions. Normally a group of 25 people take part in this dance and men also evince keen interest. Generally the song and music to this dance is given by a drum beat known as *Naiyandi Melam*. The performers carry coloured cloth in their hands and flutter them with vigour and elegance to match the tunes of music.

Sevaiyattam

This particular group dance is a speciality of Dharmapuri District in Tamil Nadu.

Silappathikaram is one of the five Tamil epics known as *"AIMPERUM KAPPIAM"*. In this Tamil epic a woman known as *Madhavi* sustained burns due to an accident. Her neighbours sing a song praying to their *'Kula Dheivam'* for the speedy recovery of *Madhavi*. It is both a prayer song and an entertainer. The performers executed their movements with small sticks in their hands.

Thagadur was a part of the kingdom of *Vallal Adhiyaman* who gave the precious *'Nelli fruit'* to Sangam Age Tamil Poetess *Avvai*. Thagadur is presently in 'Dharmapuri District. *"Sevaiattam"* is performed only here now. This dance was patronised by the *Hoysalas*, King *Krishnadevaraya* and *Athiyan Mulambas*. The pole or the stick used in this particular form of dance are considered as divine and kept in temples of worship by the people. The semi tribal people of *Bargur* area in Dharmapuri District have kept alive this particular dance.

Alagarattam

In Tamil Nadu, Madurai is popularly known as the temple City. Lord *Alagar* is the brother of the presiding deity of Madurai, Goddess *Meenakshi*. The Tamil month *Chithirai* is very important to the people of Madurai for it is in this month Lord *Alagar* gave Goddess *Meenakshi* in Marriage to Lord *Sundareswarar*.

Lord *Alagar* from his abode in the *Alagarmalai* comes down to Madurai to take part in the marriage of his sister Goddess *Meenakshi*. The people of Madurai, Ramanathapuram, Sivagangai and Dindigul District congregate in vast numbers to welcome Lord *Alagar*. They also offer fervent prayers to Load *Alagar* and entertain him by dressing like Lord *Alagar* himself to please Him. They spray coloured water on Lord *Alagar* to express their love for him. They sing in chorus in praise of

Lord *Alagar* dancing to the accompaniment of *Naiyandi Melam*.

Bull Dance *(Kaalai Attam)*

The bull is a symbol of strength and valour. Normally a man's walk is compared to a bull's walk. If the elegance of a peacock stands for the delicacy of the women, a bull's posture is compared to the majesty of a man. A bull stands for hard work and manly composure.

Here, a group of men dressed like bulls, make movements and dance to the accompaniment of music and beating of drums. This is known as *Kaalaiattam. Naiyandi Melam* is the chief musical instrument for this *Kaalaiattam*. This particular form of dance is popular in the southern Districts of Tamil Nadu. This is a main item in village festivals.

Tiger Dance (Puli Attam)

This is a folk art performed mainly by men. They paint their body with lines and spots like a tiger from head to toe, with a tail fixed to their back. They walk, roll and dance to the music.

This is very popular during *Mariamman* temple festivals in villages. Musical instruments like *Tharai, Thappattam* are used for this ferocious form of dance.

Tribal Dance

The tribals of The Nilgris are *Badugas, Kothas* and *Thodas*. These people live in harmony with nature. The dances of these tribal people though simple in language have a majestic note.

The *Thodas* worship their deity *'AMMAN'* by singing songs and the body movements are adjusted to suit the music.

Likewise the *Kothas* also dance to the accompaniment of song and music. The term *Kothas* is a derivative of the term *'hare golo'*, the term *'golo'* is the derivatives of a flute like material *(Kuzhal)*. Though their musical language is *"kothas"*, their spoken language is only Tamil. *Badugas* clad in white, sing their songs in their own *Baduga* language and make an inimitable dance movement to worship the Lord of Hills.

Dummy Legs Dance *(Kokkalikkattai Attam)*

This is a unique dance of the Vellore District. A performer attaches long wooden planks to his feet and dances to the accompaniment of music. Normally this dance is performed during the annual festival of *Gangai Amman*.

Today it is being performed at national level art festivals outside Tamil Nadu. The size of the wooden plank is 3 feet height to 4.5 feet.

It requires strenuous training. This dance requires the musical instruments of *Thappu, Settu, Thappattam*. The performer with his artificial and extended legs dances elegantly and vigorously. Due to hard training and involvement of the dance, spectators get a sense of thrill and entertainment.

Bharatha Nattiyam

This particular style of dance - *Bharatha Natiyam* originated and was nurtured in Tamil Nadu. Today, *Bharatha Natiyam* is very popular in most other countries also. Only from this classical style, various other forms of dance have been evolved. Each and every limb of the performer exhibit one or the other emotional feelings of the artist. The facial expression of the performer reflect the inner feelings of the mind.

This is a rare style of dance peculiar to the Tamils and Tamil Nadu. The ancient Tamil literature *'Silappathikaram'* mentions in detail the various aspects of this glorious dance.

Folk Songs (*Nattupura Padalgal)*

Tamil rural folk are endowed with native intelligence, imagination and elegance and seek to convey their ideas in verse combined with music and also in a touching manner. The verse and expression are spontaneous. Our folk songs are really poetry since they are also spontaneous overflow of powerful feelings.

These folk songs narrate past incidents, present exigencies and future expectations. They also carry messages from unwritten, traditional ideas handed down by tradition. These songs do not have known authors. The verbal expressions of rustic, innocent, hard working common people of village, are reflected in these songs.

Folk Drama (*Therukoothu*)

The folk plays of Tamilnadu, popularly known as "*Therukoothu"* are generally about *Puranic* themes and they are presented with music, dance and dialogues. The Dancer-Actor wears antique and sometimes eccentric costumes. Good *Therukoothu* troupes may be said to be mobile educational institutions, for they try to inculcate in the minds of the masses a deep love of God, good conduct, social virtues and a capacity to distinguish the good from the bad. Popular *Therukoothu* troupes are prevalent in the various Districts of Tamil Nadu like Thanjavur, Madurai, Ramanathapuram, Tirunelveli, North Arcot, South Arcot, etc. These folk plays are performed generally during occasions of Temple Festivals.

Heroic Feats

The Tamils are known for their physical valour and mental acumen. They love heroic feats to win the admiration and love of others. In ancient Tamil literature, it was told that the youth performed risky courageous physical feats to win the love of their sweet hearts.

This includes *Silambam* (with poles), sword fight, wrestling, fighting with fire balls etc. This requires a regular and hard training with skill and discipline. This is taught by a teacher to the students. Only after a specific period of hard training one can perform this heroic feat. This also serves as a self protective measure. In the ancient Tamil World, such heroic feats were many and varied. Today our youth in villages keep alive this ancient martial arts by practice. ■

Science Facts

* The scales of the poisonous copperhead snake smell like fresh cut cucumber.
* There are three general types of spider web, every web is unique.
* Even with its head cut off, cockroach can live several weeks before it starves to death.
* Ants never sleep.
* There are more than 9,00,000 known species of insect in the world and several new species or discovered each year.
* Flamingoes can swallow only with their heads upside down
* Most parrots have your vocabulary of about 20 words.
* A rat can survive longer without water than a camel.
* A chameleon's body is only half the length of its tongue.
* All polar bears are left handed.
* A camel's milk never curdles.

Insects & Animals

* The flightless kiwi bird of New Zealand lives in a hole in the ground is almost blind and lays only one egg each year despite this the kiwi has survived for more than 70 million years.
* Of all the land animals, howler monkeys are the loudest. Their calls can be heard over 2 miles away.
* Mammals have red blood; insects have yellow blood and the blood of lobsters is clear-but it turns blue when exposed to oxygen.
* One of the longest hibernation periods in the animal kingdom is that of the snail. A snail can sleep for nearly three years without eating.
* When bats fly out of a cave, they always turn left.
* A newborn kangaroo is about 1 inch (2.5 cm) in length.
* The humming bird is the only bird that can fly backwards.
* Pumice is a stone so porus that it floats in water.

- Sharks have one of the best immune systems in the animal kingdom. Studies show that they resist every disease, including cancer.

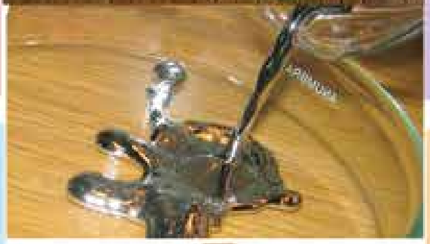
- The lowest temperature of the day usually occurs right after sunrise.
- 1 inch (2.5 cm) of rain falling over an area of 1 acre (0.4 hectares) weighs 1 ton.

- Gray whales migrate farther than any other animal about 12,000 miles (19,312 km) each year.
- The whistle of the blue whale is the loudest sound produced by any animal - 188 decibels!

- Many of the medicinal herbs we use today was first used by the ancient Egyptians.
- The most rare and valuable diamonds are either pale blue or colourless.
- Antarctica is the highest driest coldest windiest and emptiest place on earth.

- Every diamond has its own unique crystal "finger-print."
- Mercury is the only metal that is liquid at room temperature.
- Hydroponics is the technique by which plants are grown in water without soil.

- In Nepal Mount Everest is called Sagarmatha which means "Goddess of the sky."
- Cellophane tape was invented in 1930 by Richard Drew, an engineer working at 3M company.
- The paper clip was invented and pattented in 1899 by the Connecticut inventor William Middle Brook.



- In early 17th century Europe, Tea was so expensive that it was kept in locked metal boxes called canisters.

- It took 6 minutes to send a single- page by fax in 1924. In 1974 it took 3 minutes, and by 1980, 1 minute. Today, a single-page fax takes about 2 seconds.

HUMANS

- There are more than 50 trillion cells in the adult human body.
- Enamel, found in your teeth, is the hardest material in your body.
- The human head contains 22 bones.
- Babies are born without knee caps. They don't appear fully formed until the child reaches nearly 6 years of age.
- Fingerprints appear in a foetus by the age of 3 months.

- Every minute, 300 million cells die in the human body.
- The human brain is about 85 percent water.

- When you sneeze, all bodily functions stop - even your heart.
- It takes about six months for a toe nail and three months for a finger nail, to grow from the base to the tip.
- Beards are the fastest growing hairs on the human body. If the average man never trimmed his beard, it would grow nearly 30 feet (9 m) long in his lifetime.

- Every human being has a unique smell shared by no other human being.
- Most people lose half of their taste buds by 60 years of age.
- It takes 17 muscles to smile and 43 muscles to frown.
- The strongest muscle in the body is the tongue and every tongue has a unique print.

- Orange juice helps the body absorb iron more easily.
- Women's hearts beat faster than men's.
- You blink over 10,000,000 times a year.
- The thumb has a separate region reserved for it in the brain.
- Your body temperature rises slightly as you digest a large meal.

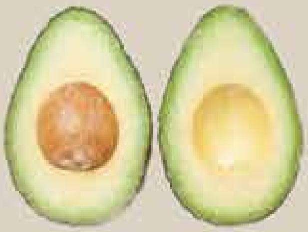
PLANTS

- Apples are more efficient than caffeine in waking you up in the morning. The apples contain a form of fructose that's particularly effective for alertness
- A notch in a tree will remain the same distance from the ground even though the tree grows taller.

- At 167 calories per 3.5 ounces (100g), avocados have the highest number of calories of any fruit.
- A cucumber is 96 percent water.

- Oak trees do not have acorns and till they are 50 years old or older.
- The word "herb" is from the old Sanskrit word bharb, meaning "to eat."
- A lemon will lose 20 per cent of its vitamin c after being left at room temperature for eight hours, or in the refrigerator for 24 hours.

- Hydroponics is the technique by which plants are grown in water without soil.
- The riper banana the more brown spots it will have on its skin.



- The most widely cultivated and extensively used nut in the world is the almond.
- The rose family of plants, in addition to flowers, give us apples, pears, plums, cherries, almonds, peaches and apricots.

- Bamboo is the world's tallest grass, sometimes growing to a height of 130 feet (39 m) or more.
- In fruits, the highest concentration of vitamin c is in the pith (skin).
- Orchids have the smallest seeds it takes more than 1.25 million seeds to weigh one gram.

Sanctuaries & National Parks

Mudumalai Sanctuary

Mudumalai Wildlife Sanctuary is located at an elevation of 1,140 mts at the tri point junction of the States of Kerala, Karnataka and Tamil Nadu. First of its kind to be set up in India, it forms a part of Jawaharlal Nehru National Park. Its area is around 321 Sq.Kms. Tropical Evergreen Forest, moist Deciduous Forest, moist Teak Forest, dry Teak Forest and secondary Grassland Swamps are found here.

It is an exciting place to see animals like Tiger, Panther, Elephant, Gaur, Mouse deer, Sloth bear , Sambar, Spotted Deer, Barking Deer, Blackbuck, Malabar Giant Squirrel, Flying Squirrel, Four-horned Antelope (Chowsingha), Wild Dog, Striped Hyena, Small Indian Civet, Wild Boar, Porcupine, Slender Loris and so on. Tigers are largely elusive but leopards on the move are frequently seen. Ombetta vayal, a swampy area is mid way between upper Kargudi and Mudumalai Game Hut and is a place to lookout for Elephant and Bison.

The Sanctuary is well connected by National Highway. All buses plying from Mysore to Udhagamandalam stops at the Reception Centre at Theppakkadu. Theppakkadu Elephant Camp established in 1972 is a big attraction of Mudumalai Sanctuary. It is also approachable from Udhagamandalam by two different routes: One is 36 Kms via Kalhatty with 36 hairpin bends through natural forests and the other is 67 Kms via Gudalur. Sanctuary can also be approached travelling 90 Kms by road from Mysore. Nearest Railway

Spotted Deer

Tiger

Stations are Udhagamandalam 67 Kms and Mysore 90 Kms.

Vallanadu Sanctuary

Vallanadu Deer Sanctuary is 35 kms from Thoothukudi on the Tirunelveli Thoothukudi Highway in the Srivaikundam Taluk and located on an isolated Hilly area measuring 64 acres. This Sanctuary has been specially created for the protection of Blackbucks. Vallanadu is the southern most place in India where a natural population of Blackbuck exists. The Blackbuck population grazing in the hilly area is a common sight to watch. Apart from Blackbucks; Spotted Deer, Macaques, Jungle cat, Mongoose and wild hares are some members of the Fauna population found in this Sanctuary. The Forest Department has fenced the entire area for the protection of these blackbucks, because of the rapid expansion activities, poaching in sanctuaries and dwindling agriculture resources. Blackbuck population is confined only to four National Parks: Guindy in Chennai, Mudumalai, Point Calimere in Nagapattinam and Vallanadu in Thoothukudi.

Gulf of Mannar Marine National Park

This Marine park of Mannar spreads along 560 Km stretch between Rameswaram and Thoothukudi. It is lying within the Bio-Sphere of Mannar. Gulf of Mannar Bio-sphere Reserve

Blackbucks

Wild Hare

Porcupine

Peacock

covers an area of 10,500 sq.km. on the south-east coast of India. This biosphere covers the coasts of Rameswaram, Thoothukudi, Tirunelveli and Kanniyakumari. It is one of the world's richest regions from marine bio-diversity perspective and it is also the first marine Bio-sphere Reserve in South-east Asia. The Bio-sphere Reserve comprises 21 islands with estuaries, Mudflats, Beaches, Forests of the on-shore environment, including marine components like Algae communities, Sea grasses, coral reefs, Salt marshes and Mangroves. Among the Gulf's 3,600 plant and animal species, there are globally endangered species of Sea Cow (Dugong) and six mangrove species endemic to peninsular India.

Marakairs, a local community is engaged in fishing. The Coastal Bio-sphere comprises more than 125 villages and about 1,00,000 human population. The Bio-sphere conservation is becoming increasingly difficult because of the Dynamite fishing, Mechanised fishing boats, danger of fishing nets hauling un-targeted marine population and Coral Population, and excessive harvesting of fish.

Viralimalai Sanctuary

Viralimalai Sanctuary is 30 kms from Tiruchirappalli and 40 kms from Pudukottai. The Viralimalai is a Bird Sanctuary, particularly a natural sanctuary of peacocks. Large number of those birds are found in this Hill zone. The Viralimalai town, Temple and Peacock Sanctuary have been declared and funded as a Heritage zone by the order of the Governor. The town is bestowed with a large number of wild

peacocks, which roam around the Murugan temple. The sanctuary is one of the best places to watch peacocks. There are at least six species of peacock pheasants distributed throughout South-East Asia, though the Palawan Peacock Pheasant or "Tandikan" (Polyplectron Emphanum) is by far the most spectacularly coloured of these beautiful birds.

Point Calimere Sanctuary

Calimere Wild Life Sanctuary is around 70 kms from Nagapattinam and 11kms from Vedharanyam. Point Calimere Wildlife Sanctuary was created in 1967 for conservation of Blackbuck, an endangered and endemic species of India. Point Calimere encompasses 17.26 sq.km. of sandy coast fringed by saline swamps and thorny scrub around the backwaters. Migratory curlews, Terns, Plovers, Sandpipers and Shanks nest in the tidal mud flats from October to March. Black bucks, Spotted Deers, Jackal, Ponies and Wild hare are sighted very often. Flamingo House, Forest Rest House are available at Kodikkarai. Alternative accommodation options are available at Vedharanyam.

Mukurthi National Park

A short 45 kms drive from Udhagamandalam, spread over an area of 79 km on the south eastern corner of the Nilgiris Plateau. The Silent valley is located on the western side of this range of mountain. This park is approachable through four different routes.

Nilgiri Tahr (earlier called as Ibex or Nilgiri Ibex) is found in reasonably large numbers here. This peak is compared to the peaks of

Sea Cow (Dugong)

Green Pigeon

Black Headed Oriole

Flamingoes

Curlews

Himalayan ranges in terms of the presence of Flora and Fauna unique to a geographical location of Himalayas .

The entire National Park bears naturally typical high altitude vegetation like rolling grassy downs, interspersed with temperate sholas occupying slopes and valleys. The landscape is extremely picturesque and should be zealously protected and preserved to maintain the primeval beauty and grandeur of the tract. Because of its Tough Terrain and difficult accessibility, biotic interference is limited. Trekking or Driving is possible only on permitted routes.

Indira Gandhi National Sanctuary

Indira Gandhi Wild Life Sanctuary and National Park: There is a 30 km wide gap (big break in the Western Ghat mountain range) between the Nilgiri Hills to the north and the Anamalai Hills to the South that straddles the Kerala and Tamil Nadu border and serves as a major communication route between them. Highways and Rail Transport connect Palghat with Coimbatore and Pollachi. This huge gap is called as Palghat Gap

This was originally called as Anamalai Wild Life Sanctuary notified in the year 1974 and established in the year 1976. Later on renamed in honour of former Prime Minister

Pangolin

Indira Gandhi's visit during 1961 . It is located at an altitude of 1,400 meters at the Top Slip. The National Park is 108 sq.kms core area of the total 958 sq. kms sanctuary zone. Indira Gandhi Wild Life Sanctuary was declared a Project Tiger Zone in the year 2008. Elephants, Gaur, Tiger, Panther, Sloth Bear, Pangolin, Black Headed Oriole, Green Pigeon and Civet cat can be seen in this Sanctuary. Karian and Anaikunthi Sholas, Grass Hills, Waterfalls, Groves, Teak forests, Estates, Dams and Reservoirs add beauty to Anamalai Hills and attracts visitors in large numbers. Elephant Safari and Van services are available at the Top Slip to take the tourists around the Sanctuary.

Mundanthurai Sanctuary

There is nothing to differentiate this sanctuary from the Kalakkadu Sanctuary, except for the absence of the Elephant and the Gaur. Situated in the Tirunelveli District, this sanctuary has dry decidious to tropical wet evergreen forests and patches of reeds in an area of 567 sq.kms.

The animal wealth in this sanctuary includes the Tiger, Bonnet Macaque, Langurs, Slenders Loris, Sloth Bear, Sambar, Chital and the Wild Dog. This sanctuary is excellent also for the various species of avifauna and varieties of reptiles and insects. Trekking trips along trekking trails can be undertaken with prior permission from the Forest (Wildlife) Department.

Mayura Thottam

Mayura Thottam is 22 kms from Ottapidaram of Tuticorin District. Mayuram

Sloth Bear

Civet Cat

Nilgiri Marten

Grizzled Squirrel

means peacock in local language and Thottam means Garden. Large Peacock farm is located here in an area of 55 acres, hence this place is named as Mayura Thottam. The Peacocks have made this farm their home and even breed here. The entire farm is full of Coconut Groves and Guava Trees. Tourism Department has accommodation with Bed and Breakfast plan for the benefit of the tourists. October and November is the best period, when tourists can visit and enjoy the grand sight of Peacock Dance throughout the farm .

Srivilliputhur Sanctuary

Squirrel Wildlife Sanctuary: Located at Srivilliputhur at an altitude that varies from 100 m to 200m, spreads over a 480 km² of area. This was declared as a sanctuary in December 1989 as the Grizzled Squirrel Wildlife Sanctuary. The sanctuary shares a common border: on the South western side with Periyar Tiger Reserve, on the North Western side with the Megamalai Reserve Forest and its southern border limit with the Sivagiri Reserved Forest of Tirunelveli Forest Division. Large part of the Grizzled Squirrel Wildlife Sanctuary lies mostly in Virudhunagar District and partly in the Western Ghats ranges lining Madurai District. It receives both south-west and north-east monsoons. The varied climate and topographic conditions prevailing in the sanctuary present remarkable diversity both in Flora and Fauna. It is the eastern watershed boundary for the river Periyar and is one of the best preserved forests south of the Palghat Gap. The tributaries of the river Vaipaar originates from the hill tracts of the Sanctuary and the average rainfall is between 200 to 2000mm. Hot tropical climate prevails in the upper elevations. The sanctuary has a wide range of habitats - Upper Montane forests and grasslands at higher elevation; Wet Evergreen at mid elevation and Semi Evergreen, Moist Deciduous, Open Deciduous, Closed Deciduous forests and scrub jungles at the foot hills. The sanctuary has one Medicinal Plant Conservation Area (MPCA) located at Thaniparai.

Courtesy: ***Tamil Nadu Tourism Department***

HOW TO IMPROVE ONE'S IQ

The Steps or factors that help us to improve our IQ are:

- **Concentration:** Watching and observing things carefully with concentration make the brain to exercise and helps in doing things wisely.
- **Open Mind for new ideas:** Every time looks for new things around and doing new things helps in enhancing the brain activity that leads to improve the IQ.
- **Reading:** Reading enhances the mind's ability to comprehend, as well as encouraging thinking critically. Reading a book that has never read before broadens horizons, thus increasing IQ. Reading different genres is even more productive, as well as reading newspapers, current events magazines, and multi-content periodicals. Make sure the book is in reading level and not something that is too easy.
- **Don't give up:** Ignore limiting stereotypes such as 'An old dog cannot learn new tricks'. Imagine the success you will feel when you bump up ten points. Soon enough, that fantasy will become a reality.
- **Try writing with opposite hand:** Writing with your opposite hand can in fact lead to stimulation of the side of the brain that is opposite to that hand. So perhaps a southpaw could go righty and think more logical, or a righty could try going left-handed to be more creative. However, keep in mind this is only a theory.
- **Write whenever possible:** Send a note instead of an email, or write a draft of a paper. It will increase visual and kinesthetic stimulation.
- **Play video games:** Games can be a great way to stimulate the brain. Try to play a game that is out of usual range of choices. It will help in thinking differently. Especially look for games that provide with problems to solve or force you to think quickly.
- **Work on cryptology:** This is when a message is written in codes and tries to figure it out. It's challenging for some, but after a while may even become enjoyable. All logic puzzles are great.
- **Practice crosswords and Sudoku:** These activities stimulate mind and thought processes. People may not normally consider

word searches thought-provoking, but if practiced in addition to other mind games, they could prove to be easy and stimulating.

- **Do logic and lateral thinking puzzles:** These help the brain think outside the box and solve problems in different ways.
- **Take a weekly IQ test and record your results:** Consider placing the results on a line graph using excel or another graph compatible programme.
- **Listen to classical music:** The Mozart effect suggest that by listening to classical music, a short-term improvement is induced on the performance of certain tasks. Gradually, this may have a somewhat long-term effect.
- **Excel in School and have a better career:** There is a huge amount of evidence substantiating the correlation between excellent grade and better intelligence. Good grades are the path to better careers and better ways of life.
- **Eat brain food:** Fish is one such brain food. However, avoid fish such as Tuna, as it often contains a high amount of mercury. Also try an Omega 3 or fish oil supplement. These also have great effects on health.
- **Exercise:** This increases blood flow to the brain-resulting in increased thought/IQ. Using body clears head and creates a wave of energy. Afterwards, one feel invigorated and can concentrate more easily.
- **Sleep:** In order to store information into the long-term IQ one needs to get enough sleep to transfer the short-term into the long-term. Just remember, it is a proven fact that sleeping longer stores more information into the long-term IQ.
- Use a Rubik's Cube, 15- puzzle, or other toy to pass the time instead of watching TV.
- Play games like chess and crossword puzzles. They help to think and it can be fun at the same time.
- Take nice, slow deep breaths when in thought.
- Do cardiovascular exercise and cut down on fatty foods to circulate the blood flow to brain.
- **Minimize Television Watching:** The problem is watching television doesn't use mental capacity OR allows it to recharge. It's like having the energy sapped out of a muscle without the health benefits of exercise.

When feel like relaxing, try reading a book instead. If too tired, listen to some music. When with friends or family, leave the tube off and have a conversation. All these things use mind more than television and allow relaxing.

- **Self-awareness:** This may not seem important to brain power, but it is. When you know yourself better, you can avoid the usual effects of ego and emotion in your seemingly "rational" thinking.

Or you can at least take it into account. Watch yourself, especially as you explain things or argue.

- **Motivate yourself:** Motivation is as important to mental tasks as it is to any other. Learn a few simple techniques for self-motivation.
- **Avoid too much stress:** "Stress causes brain damage." Long-term stress has repeated been shown to hurt the brain, not to mention the

rest of the body. Learn a few stress reduction techniques if you get stressed out often.

- **Learn the tricks to get higher IQ score:** Enough sleep proves to give higher intelligence. In fact, you can think better if you have had enough rest and sleep, especially prior to taking the test. Breathing deeply through your nose and sitting up straight can also be a way to do well on IQ tests. Changing your diet like eating more fish may speed up your brain waves too and increase your level of concentration.

Many studies have been done to prove that music has an effect on a person's intelligence. So try listening to some Mozart music before the exam. One study shows that listening to this music for at least 10 minutes can increase your IQ score by nine points.

- **Do mental exercise**: Enjoy a longer-term of improved intelligence by doing mental exercises. Just as your body need physical exercise in order for you to become strong, so does your brain needs exercise in order for it to remain sharp. Play mentally challenging games.

Source: ***How to Improve your IQ by Bhawana Sharma***

By - Election to Four Tamil Nadu Legislative Assembly Constituencies -2019

The Election Commission of India has announced the poll schedule for the By-elections to Tamil Nadu Legislative Assembly from 116.Sulur, 134.Aravakurichi, 195.Thiruparankundram and 217.Ottapidaram (SC) Assembly Constituencies as follows:-

Filing of nominations and issue of Notification	: 22.04.2019 (Monday)
Last date for filing of nominations	: 29.04.2019 (Monday)
Date for Scrutiny of Nominations	: 30.04.2019 (Tuesday)
Last date for withdrawal of candidatures	: 02.05.2019 (Thursday)
Date of poll	: 19.05.2019 (Sunday)
Date of Counting	: 23.05.2019 (Thursday)
Date before which election shall be completed	: 27.05.2019 (Monday)

Chief Electoral Officer, Tamil Nadu.

SHORTCUTS TO FITNESS

Everyday activities like talking, playing with the kids can add up

You don't have a second to spare in your day for exercise. Although you have tried countless times, you have never been able to stick with a workout routine.

Your house is much too small to accommodate bulky exercise equipment. You can only dream of being able to afford one of those expensive health-club memberships. Besides, you'd be much too embarrassed to prance around in front of an aerobics class full of women and men who are thin, fit and gorgeous. So You're a helpless case right?.

Wrong, You don't have to spend hours a week at a gym to get in shape. You can improve your health and fitness-and look and feel a lot better-by incorporating even small doses of physical activity into your day. As a matter of fact, you hardly even have to break a sweat.

Ridiculous, you say? Not at all, according to the most recent findings from the nation's leading exercise experts. "The fitness gurus used to insist that we had to punish ourselves with strenuous aerobic exercise for at least 30 minutes three times a week to get fit?", "But new studies show major benefits from exercise so modest, it doesn't feel like a workout."

"For lowering cholesterol and blood pressure, moderate exercise works as well as a strenuous workout" "And the more out of shape you are, the more you will benefit from doing low intensity exercise".

Another study showed that even moderate walking reduces tension and anxiety. "No matter how slowly they walked, everyone felt less stressed afterwards"

"The Health benefits of low level exercise are great news. Intensity does not matter. What is most important is regularity. If you become even slightly more active and stick with it your health will improve.

EXCUSES, EXCUSES

Everyone starts with the best of intentions. But all too often, we wind up making excuses for why we can't make time for fitness. Do any of these sound familiar?

"I am Just too busy", ofcourse you are busy. You lead a hectic life. That's more reason to exercise - to help manage your stress and build the self-esteem, stamina, strength and flexibility you need, to cope with all the daily demands of yours.

"I don't have large blocks of time to exercise". You don't need them. If you take just three 10 minute walks a day during breaks, you're exercising for 30 minutes.

What kind of physical activities do you already engage in? Shopping, cooking, child care? Stretch, bend and lift more during house work. Walk briskly while running errands. Get physical when you play with your children.

"I hate exercise". Don't sign up for water aerobics if you hate to swim. Choose a physical activity you like and do it regularly. You don't have to run, do sit-ups and use a stair climbing machine. Even gardening or a nightly stroll burns calories.

I have never been active, it's too late to start now. "A recent study shows that even 90 year old lifelong fitness phobics gained significant physical and emotional benefits from modest, regular exercise. No matter how long you've been out of shape, it's never too late to get fit. Just start now and keep at it.

"I feel self-conscious. I'm a Klutz when I exercise and I look terrible in tights". You don't look ridiculous. You look like a woman who's taking control of her life and health. You look great. Besides, everyone else is too busy obsessing about the way they look to worry about you.

"I never seem to improve. "Be patient. It takes a month or two to notice the aerobic payoffs of exercise, and a while longer for any physical changes to appear. Keep a record of your progress. Make a chart that shows how many blocks from work you park or how many flights of stairs you can climb before you feel winded-anything that you can measure. Plot your progress on a weekly basis. Before you know it, you're sure to see some improvement.

"I can't afford to join a gym or turn my home into one. "You don't have to. Do it yourself workouts-like housework and walking-don't cost a penny.

"I never stick with it". You're not alone. Half of those who start exercise give it up within 12 months.

To keep from being a quitter, follow these steps.

- Be realistic. For every year you've been out of shape, it takes a month to get fit again. What's more, remember that you may not reap the physical benefits of exercise until six to eight weeks have passed. But you"ll begin to feel the emotional benefits almost immediately.
- Start slowly and don't overdo it. You should be able to carry on a conversation while exercising. If you find yourself becoming breathless you may be pushing too hard.
- Do only activities that feel fun. If one type of exercise isn't enjoyable, switch to another. Getting exercise should not turn into a chore.
- Find a buddy. It is much easier to stick to a regular fitness routine when you exercise with a friend.
- Vary your activities. You'll be less likely to get bored and lose interest in working out.

FITNESS FIXES

There are plenty of simple shortcuts you can do to integrate more physical activity

into your daily life. "Choose two or three and commit to doing them everyday."

Try walking up the stairs instead of taking the elevator. If you're out of shape, start by walking down the stairs. When climbing stairs no longer leaves you winded, climb a little faster.

Park a few blocks further away. Walk the extra distance to work, the mall, the movies, or friends' homes. As you gain stamina, park even further away and walk more briskly.

Stash a pair of walking shoes at work. Slip them on for walks at lunch. Better yet, take a daily ten-minute stroll before lunch. You may discover that you'll want to eat less lunch afterward.

Buy a backpack. Then instead of driving around town when doing your errands, walk as much as possible and use the backpack to hold your purchases.

Avoid "Food dates." Instead of meeting friends for lunch, coffee or desert, make arrangements to take walks, go dancing or

shopping, visit a museum or go for bike rides together.

Walking your dog. If you don't have one, borrow a neighbour's. Dogs are great exercise companions.

Make breaks count. During television commercials or breaks at work, get up and stretch or walk around. Encourage co –workers and family members to join you. Use the opportunity to chat.

YOUR BEST EXERCISE INVESTMENT: GOOD SNEAKERS

Forget expensive health clubs, exercise equipment and designer sweats. You don't need them to get fit. But good sneakers are essentia to even modest exercise programmes.

- ❖ Check your feet, if you are flat-footed, you need extra arch support. If you have a high arch, you need extra shock absorption. For weak ankles, consider high-tops.
- ❖ Check your old sneakers. Notice where they're most worn and look for shoes reinforced in those areas.
- ❖ Shop in the afternoon. Feet swell during the day.
- ❖ Don't get overwhelmed by the different types of sneakers. Worry less about whether they're crosstrainers or aerobic sneakers and instead concentrate on the quality and feathers.
- ❖ Get the right fit. Experts say there should be about ¼ inch between your toes and the tip of the sneaker.
- ❖ Try on both sneakers. Feet vary greatly in size.
- ❖ Check the weight. The lighter the better.
- ❖ Check the traction. Shoes should not slip on any surface.
- ❖ Test them. Sneakers should feel comfortable in the store. They shouldn't require breaking in. Jump up and land on your fore feet. In well-cushioned shoes, you should feel almost nothing. Rock from side to side. You shouldnot wobble. Pivot in different directions. Your shoes should always feel flexible.

Don't automatically use the phone or intercom at work. Walk to your co-workers desks instead.

Make the most of phone time. Don't sit while talking-pace instead. Invest in a longer handset cord so you can walk further, or get a cordless phone.

If you must stand in one sport, march in place, raising your knees up high. Or rise up on your tiptoes. Do this five times, then do five half-knee bends. Gradually work up to doing ten repetitions.

Another telephone tip: Keep a small three pound weight or a can of food near the phone and, while talking, do weight-training curls and presses.

Curles: With your arm straight, hold the can or weight down by your hip. Bend your elbow and bring the weight up to your shoulders.

Presses: Start with your arm in the curled position, then, straighten it over head. Do five or each. When you feel ready, do ten.

Make the most of "microwave minutes". Don't stand around thinking about the snack you're going to scarf down. Pace, stretch or do some calisthenics.

Put more energy into house work: Scrubbing floors, vigorously sweeping and vacumming, washing the windows and other chores provide more exercise than you might think. What's more, if you step up the pace you will finish much sooner-and get a worthwhile workout as well.

Make the most of times spent unpacking groceries: Curl and press cans a few times. When you feel ready, try it with sixpacks.

Don't always automatically reach for the food processor: When time permits, cut, chop and dice all those vegetables by hand.

Wash and iron your own clothes: You will get a workout and save on laundering. Spend that money on something exercise-related, such as dancing class or an aerobics tape.

Work outdoors: Pushing a power mower is great aerobic exercise. Or retire your power mower and invest in a push model. Digging, weeding, raking and shovelling are also good-for the body and the mind.

MOTHERS NEED FITNESS, TOO.

Here are a few more tips, just for mothers;

Walk your baby: Infants, love motion, put your baby in a backpack or carriage and take a stroll to the park or the store.

Weight train with your baby: Play with your little one on the floor. Lift her overhead, exercise her arms and legs.

Push your child: Kids love swings and merry go rounds. Pushing them provides you with great exercise.

Join in older children's games: Play tag. Go roller skating, jump, rope climb a play stucture, take a swim, a bike ride or a row-boat cutting on a lake. You will have so much fun that you might not even notice that you are exercising.

Courtesy: The Healthy Woman

Rain is the most important source of all water on earth. The water cycle is unique. In an endless cycle, rain rejuvenates all fresh water resources. Rainwater recharges the surface sources and slowly seeps into the ground to reach and replenish the underground aquifers.

Today we face a severe water crisis world over.

Groundwater, accessible with easy extraction techniques available today, is under great stress. Our Groundwater levels have declined sharply in most areas. In some aquifers, the fresh water is underlined by brackish water. As more and more ground water is pumped out, brackish water rises and contaminates the fresh water, making it unsuitable for drinking. In coastal areas, there is always a threat of seawater intrusion into freshwater reserves; as a result tube wells are downed to extract more ground water. The crises become more and more urgent because while ground water continues to be pumped out in huge quantities, very little water is recharged into aquifers.

With rapid urbanization, lakes, ponds and green areas that contribute to recharge have reduced drastically. Catchment areas have been paved and reclaimed for construction. As a result even when the rains come, groundwater does not get recharged.

Each year, the State of Tamil Nadu receives quite a substantial amount of rainfall. However, in urban areas, this rainwater is unable to seep into the ground, because the land is sealed for miles with concrete buildings and a network of roads and other impervious surfaces. Instead, this precious rainwater rushes out through drains, nalas and flows out into rivers and to the sea. Billions of litres of fresh water are lost each season.

It thus becomes important and vital to address the issue of water. Considering that water can only be managed and cannot be produced, it becomes important to catch, store and manage water intelligently. In other words, it is important to HARVEST RAIN and MANAGE WATER.

Tamil Nadu is a coastal State prone to droughts. The climate of this State ranges from dry sub-humid to semi-arid. (Sub humid regions are those regions where moisture is normally less than under humid conditions but still sufficient for the production of many agricultural crops without irrigation or dryland farming. Semi arid regions are regions that are between the desert climates and humid climates in ecological characteristics and agricultural potential).

Rainfall in Tamil Nadu

Tamil Nadu has 3 distinct periods of rainfall. It receives a little rainfall during the monsoon season (from June to September). It receives its maximum rainfall during the North-East monsoon or what is popularly known as winter rains (from October to December). It also receives a little rainfall during the dry season (from January to May). Under normal conditions the State receives about 945 mm (37.2 in) of rain. Since the State is entirely dependent on rains for recharging its water resources, monsoon failures lead to acute water scarcity and severe drought.

A little about Tamil Nadu's water resources

Though Tamil Nadu is largely a dry region it has several perennial rivers - Palar, Cheyyar River, Ponnaiyar, Kaveri, Meyar, Bhavani, Amaravati, Vaigai, Chittar River & Thamirabarani and a few non-perennial ones too - the Vellar, Noyal, Suruli, Gundar, Vaipar, Valparai and Varshali.

Canals, tanks and wells are the main sources of irrigation for farmers in the State. As of 2005-2006, the state had 2,395 canals with a length of 9,747 km, 40,319 tanks, 670 ordinary Government wells, 1,620,705 ordinary private wells and 290,611 tube wells.

Tamil Nadu's Ground water quality

Tamil Nadu has its share of problems with groundwater quality. The main problems it faces are of salinity (inland salinity as well as coastal salinity) and Fluoride content in its ground water resources.

The Districts most affected by salinity are Karaikal and Pondicherry, Nagapattinam, Pudukottai, Ramanathapuram, North Arcot, Dharmapuri, Salem, Trichy and Coimbatore. The fluoride content is high in the areas of Dharmapuri, Salem, North Arcot and Villupuram.

Groundwater is depleting rapidly. Our rivers are drying up. Our wells are drying up. Our lakes are drying up. We are boring deeper and deeper into the ground in search of the elusive drop and are extracting much more water from the ground than nature is able to fill up, until it has now become a major problem. Women walk kilometers to fetch water. Inadequacy of water has affected every aspect of life. It is evident we have a problem. And now there is a drastic need to counter the problem. We have the options of reducing our extraction and/or replenish ground water sources as a conscious act on our part.

Traditional Systems of harvesting rainwater

Every village in Tamil Nadu had three water bodies: one for irrigation, one for cattle and an *Oorani* (pond) for drinking water. All three are rain-fed. Many villages have survived centuries because of these catchment bodies.

The traditional systems are a well recognised fact, as this has been given as an example in the - XI-five-year-plan (Rural Drinking Water and Sanitation in the Eleventh Plan period - Excerpts). It says:

"For the people of Tamil Nadu the traditional Ooranis or ponds have truly proved to be a blessing.

The Ooranis were developed as the main supply systems in Tamil Nadu centuries back. These earthen bunded ponds were constructed by the collective efforts of the people over the ages and have been designed hydrologically to have adequate and assured in flow of surface run-offs. Almost all Ooranis are well connected with irrigation tanks called Kanmai.

In recent years however the Ooranis were neglected and dilapidated due to implementation of new water supply facilities like handpumps, deep borewell and Combined Water Supply Schemes (CWSS)."

In fact Tamil Nadu had a wonderful system of participatory maintenance of these water bodies, called *Kudimaramathu*. *Kudimaramathu* was a system in which the villagers would contribute free labour to maintain these structures involving desilting of the tanks and ponds, renovating the structures, deepening of channels, clearing and cleaning of the water bodies etc.

Lifelines of Tamil Nadu: *Kanmais* and *Ooranis*

Kanmais are traditional tanks with earthen bunds constructed many centuries ago. They are large surface water stores that collected and stored surface water run-offs. They largely supported and were used for agricultural purposes as well as for drinking water.

Ooranis are small ponds that have collected rainwater from rains and from surrounding catchment areas. These *Ooranis* traditionally were used for various needs of drinking, washing, bathing needs of the villages around it.

Oorani is a Tamil word meaning village pond. It is an institution as old as Tamil society. Poet Thiruvalluvar referred to them 2,000 years ago. *Ooranis* were usually endowed by ruling or merchant princes. Beneficiaries were involved in excavation and maintenance. They developed a sense of ownership. After Independence the Government Departments took over every aspect of village management.

Roof-top rain water harvesting

Rain can be caught as it falls - it can be caught into anything — roofs, roads, pavements, ground and stored into tanks, wells, open surface storages like lakes and ponds in the aquifers. Roof-tops are excellent rain-catchers. After the initial run-off when the roof becomes clean and the water harvestable, considerable amount of water can be caught from the roof tops.

The components of a standard Rooftop Rainwater Harvesting System

A Rainwater harvesting system is made up of the cycle of "Harvesting - Carrying Filtering- Storage - Use".

1. Harvesting

We normally come across two types of harvesting structures, one is RCC slab flat roof and the other is traditional sloping roof system. However for this example we are considering flat roofs of roughly 35 square meters (350 sq. Feet) that have been typically built in the Tsunami reconstruction effort.

2. Carrying

In case of a flat-roof, a PVC pipe or Cement pipe is appropriate and advisable.

3. Filtering

Rainwater is a pure form of water, free of any biological & bacterial contamination. However, when it rains some suspended impurities in the atmosphere get dissolved in the rain. To prevent any form of contaminations of the water stored in the tank, these impurities need to be filtered out. This filtering is carried out in two stages:

a. First-Rain separator: The first rain separator is a built-in plumbing system that separates the first few minutes of the rain.

b. Filter : After the first rain separator, the rain water will still carry suspended impurities. These need to be filtered out. This can be done with a simple sand - stone - charcoal filter. Even a clean folded cotton cloth placed in a sieve acts as an effective filter.

4. Storage

The last component which completes the Rainwater harvesting system is the storage system. The water from filter is directed and stored in the storage-system for day to day use.

Typically one can go for either of the following types of storage systems:

a. Individual tank based system where the water is stored into brick/stone masonry tank or pre-cast ferro cement tanks or Polypropylene tank (popularly known as Sintex tanks)

b. Surface Storage systems like ponds, tanks, etc.

c. Underground storage systems: mainly charging the existing aquifers through directing the water into hand-pumps, Dug wells, Pits and/ or Trenches

5. Use

Water stored in any of the systems is fit for use. It can be used on a day to day basis for all needs. For drinking and cooking, one will need to take standard care processes to clean and decontaminate the water.

Courtesy: **A guide to techniques in water *conservation & management***

Religious Places in Tamil Nadu

Rameswaram

Rameswaram is a small Island and Major Pilgrim Centre in the Gulf of Mannar. It is connected to the mainland by Pamban Bridge. On his return from Ceylon after Ravana Yudham (war) in Lanka, Sri Rama offered his repentance prayer to Lord Siva to absolve his sins that he had committed by Slaying Ravana. Every day, this island receives thousands of pilgrims from all parts of the Indian Sub Continent who came there to absolve of their sins and also perform rituals for their ancestors. This is on par in sanctity with Varanasi or Benares of the North India.

Sri Ramanathaswamy Temple: This temple is located near the sea on the eastern side of the island. It is well known for the architectural beauty of its magnificent Prakaras or corridors with massive sculptured pillars on either side. 197 mts. corridor East to West is believed to be the longest in the world and there is another corridor of 133mts. wide from South to North. This temple has undergone many changes from 12th century under the reign of different rulers. Special Pooja is performed every day to the *Spatikalingam* [crystal lingam] installed by Adi Sankara in this temple. There are two lingams in the Sanctum

Sanctorum, one brought by Hanuman from Kailash called *Vishwalingam* and the other hand made by Sita called *Ramalingam*. As instructed by Rama it is the *Vishwalingam* that gets the first Pooja attention even today.

Agni Theertham: Sri Ramanathaswamy temple faces the Theertham on the eastern side. The shore is only about 100 mts. from the temple. The sea is very calm and peaceful. Since it is considered sacred it is called *Agni Theertham* because *agni* is considered to be purificatory element. Poojas and Rituals are performed to please the ancestors in this shore area. Devotees of Lord Siva take a dip in the *Agni Theertham* to wash away their sins.

Gandamadana Parvatham: It is a hillock situated 3 kms away and is the highest point in the island. From here one can see the imprint of Lord Rama's feet on a chakra. The entire island of Rameswaram is visible from this point.

Sugreevar Temple / Theertham : It is situated on the way to Gandamadana Parvatham near the Doordarshan Kendra. Sugreeva is the younger brother of Vaali of Ramayanam.

Satchi Hanuman temple : It is 3 kms from the main temple, on the way to the Gandamadana Parvatham. This temple is the place where Hanuman delivered the good news to Rama of having find Sita, producing Choodamani, a jewel that belonged to Sita, as Satchi [evidence]. Hence it is called Satchi Hanuman Temple

Badrakaliyamman Temple : This is a temple for Devi Durga around 2 kms from the main temple on the way to Gandamadana Parvatham.

The PANCHAMUGA (Five-Faced) Hanuman Temple: It is located just 2 kms from the main temple, the deity Hanuman is drawn with senthooram (Vermillion). Idols of Lord Rama, Sita and Hanuman, brought from Dhanushkodi after the 1964 cyclone, are placed there. The Floating Stone used to build the Sethu Bandhanam or the bridge between India and Lanka too can be found in this temple.

Jada Theertham: It is located 3½ kms from Rameswaram. It is believed that, Rama on

his return from Lanka after Ravana Vadham, washed his Jada [hair] in this theertham to purify him before proceeding to worship Ramalingeswarar.

Nambu Nayagiamman Temple: This temple is greatly venerated by the people of Ramnad District. It is situated 8 kms from the main temple in Rameswaram on the way to Dhanushkodi.

Kothandaramaswamy Temple: This temple is 12 kms from Rameswaram. According to a popular belief, it is at this place, *Vibhishanan* [brother of Ravanan] surrendered before Rama.

Dhanushkodi: It is 18 kms from Rameswaram temple. It is the southern most tip of the island. Dhanushkodi was completely washed away in the 1964 cyclone. Tourist can witness the remains of the devasted town. Tourist go for surfing here.

Kumbakonam Temples

Kumbakonam is one of the ancient temple town picturesquely located amidst the two rivers *Cauvery* and *Arasalar*. In olden days it was called Thirukudamookku and it is also popularly called as *Kudanthai* now. It is popular for the Divine Tank in the heart of the city where *Mahamagam* Festival takes place when lakhs of pilgrims from all over Tamil Nadu converge here to take dip in the tank at the auspicious hour. All the deities of the temples in and around turn up here to have a dip at that time too. This festival falls in the month of Maasi (Feb-Mar) on Magam Star Day. The town reached the peak of its popularity during the British Period and it was a prominent centre of European education and Hindu culture and it assumed the name as the ‘Cambridge of South India’.

Aadhi Kumbeswarar temple: It is one of the important temples dedicated to Lord Siva. It is a *padal petra sthalam* (glorified by saints and Nayanmars). This temple complex is 2,800 square metre in area and has Four Gateways or Towers on all four sides, the tallest being the 11 stage, 30 m tall tower on the eastern side. Apart from the presiding deities of Kumbeswarar and Mangalambigai Amman many shrines are located in this prominent temple complex. The sixteen-pillared hall built during the Vijayanagar Period has all the 27 stars and 12 zodiac signs carved in a single stone. *Maasi Magam* festival is the important festival of the temple. 9th Century Chola Dynasty and the Thanjavur Nayaks made remarkable contribution to the development of this temple.

Sarangapani Temple: It is near the Uchippillaiyar Kovil junction at Kumbakonam. Lord is Sarangapani / Aaravamuthan and Goddess is Naachiyar Komala Valli. It is one of the 108 Divya Desams glorified by the Aalwars of Vaishnavite sect and also classified as one of the Pancharanga Kshetram on the banks of Cauvery. Medivial Cholas, Vijayanagar and Madurai Nayaks have developed this temple during their reign. Lord Sarangapani is in reclining position called as Udhana Sayana. 175 feet tall, 11 Tier Raja Gopuram or the tower is the highlight of the temple. The temple tank called as POTRAMARAI KULAM is located on the western side. Sanctum Sanctorum is made up with 12 columns, shaped like a chariot. Sarangapani believed to have appeared and blessed Saint Hemarishi here. Chariot Festival is the most colourful festival of the temple in the month of Chithirai (Apr-May). The chariot is said to be weighing 300 tons.

Someswara temple: This temple is located on the south of Sarangapani Temple. It faces the North and there is a big tower or Gopuram on the eastern side. The architectural style and element of this temple resembles the Dravidian Architecture of the 13th Century of the Chola Regime. Aaravamuthar and Thenar Mozhi Thayar are the other deities enshrined in this temple complex.

Nageswaran temple: This temple was built by Aditya Chola during the 9th Century. This temple has *Pralayakala Rudra Sannidhi*. Adisesha and Surya had worshipped Sri Nageswara here. It is also a *Rahu Parihara Sthalam*. A legend has it that the mythological serpents *Aadhiseshan, Dakshan* and *Kaarkotakan* worshiped Lord Siva here. The orientation is structured in such a way that it allows sunlight inside the temple, right on the sanctum sanctorum only during the Tamil month of Chithirai (April/May). It is also called Surya Kottam or Keezha Kottam. It is said that Sanctum Sanctorum of both Nageswaran temple and the Saarangapani Temple are similar in the form of a chariot. The temple consists of three gopurams on the Eastern, Western and Southern sides. There is a local belief that, visiting Nageswaran Temple, Tirunageswaram and Thirupampuram in the Morning, Afternoon and Evening has significant meaning for Rahu

Dosha Pariharam. First three days of Tamil Month Chithirai [Apr-May] the sun rays falls directly on the base of Sanctum Sanctorum.

Raamasamy Temple: This temple was built in the 16th Century by King Achutha Nayak of Thanjavur. It is located on the South East of *Potramarai Kulam* and South of *Uchippillaiyar* Koil. The temple has a 3-tiered Gopuram. Shrine of Sri Rama with Vyakara Mudra seated with Sita has been installed in the Sanctum Sanctorum. Lakshmana, Bharatha and Chatruguna is in standing posture next to Rama and Hanuman kneeling down holding the Manuscripts.The outer Court has pillars sculpted with finesse, various sequences of Ramayana and each pillar is carved out of a single rock. Paintings of Pattabishekam (Coronation) of Vibishna and Sugriva; Hanuman playing the Veena, Agalya getting relieved of the curse, too are found in the temple. The temple is a typical Nayak style of temples. One can read the Chitra Ramayana on the walls of the Sanctum Sanctorum while going around the Sanctum Sanctorum.

Chakkarapani Temple: The Temple is the solitary temple complex for Sri Chakrapani. Chakrapani otherwise called as Sakarathazhvar, is on the north of the Periya Kadai Veethi (Big Bazaar Street) on the southern bank of River Cauvery. It is believed Lord Vishnu appeared in the form of Sudharsana Chakra to put down the arrogance of Suryan. It is said the Chakrapani has a third eye like Lord Siva. This is the Second biggest Vaishnavite temple of Kumbakonam. Agampara Vinayakar, Panchamuka Anchaneyar and Thayar Vijayavalli are enshrined here in this complex. There are two different entrances for the two Ayanmars. Utharayanam (Thai – Aani) and Dakshinayanam (Aadi – Marghazi) to worship Sarangapani in the Sanctum Sanctorum. They are called as Dakshinayana Vaayil (gate) and Utharayana Vaayil (gate). The outer court adjoining the Sanctum Sanctorum has been designed like a balcony.

Kambatta Viswanathar: Pettai Adhi Kambatta Viswanathar enshrines the presiding deities of Kambatta Viswanathar and Anandha Nidhiambigai. It is located on the south of Aadhi Kumbeswarar Temple. It is called as Malathi Vanam also. This temple is also called as Kambatta Viswanadhari because the coin minting was done here during Nayaka Period. It is believed the famous saint 'Thoomakethu' found this temple.

Pana Pureeswarar Kovil: This is relatively a smaller temple complex located amidst the Panapuri Agraharam in the heart of the town. Veda Vyasar is believed to have visited this temple and worshipped the Lord here.

Velankanni Church

Velankanni is 12 kms from Nagapattinam. It is the most important and revered Christian

Pilgrim Center of the State. It is dedicated to 'Our Lady of Health' and popularly known as 'Sacred Aarogya Maatha Church'. Devotees believe Virgin Mary has miraculous healing Powers. Pilgrims of all faiths and religion come to this church to get the blessings of Our Lady of Health. The Church has an imposing

façade with Tall Spires and the wings present the shape of a cross. The Legend goes like this: It is believed that Virgin Mary appeared before a shepherd and asked Milk to feed Infant Jesus. Since then the milk pitcher of this shepherd never dried and kept filling with fresh milk always. Later at the end of 16th Century Virgin Lady appeared and cured a Lame Boy. It is after this miracle the Church was constructed. Lighting a candle and offering the same to Virgin Lady is the simplest form of Prayer. Velankanni is famous for its annual festival of Our Lady celebrated as 10 days festival during August-September, starting on 29th August. This festival attracts millions of pilgrim from all parts of India and the world irrespective of faith and religion. Devotees offer metal replica of the parts of the body, cured by Lady of Health by way of answering their prayer. Imbibing the local culture, tonsuring of heads and ear-boring ceremony too are performed in this Church by the pilgrims. A Small Museum is attached to the church, which displays the collection of the offerings made by the faithful devotees.

Nagore Dargah

Nagore Dargah is dedicated to Meera Shahib Abdul Qadir Hajrath Shahul Hamid Badshah. He was a spiritual leader and lived between 1490–1579. He was fondly called as Mian SAHIB. The Dargah is 5 Kms from Nagapattinam. It is established in an area of 5 acres with four impressive entrances on all four directions. The 131 ft. tall Minaret called 'Periya Minara' was built by the Thanjavur King Pratap Sing in the 18th Century, about 200 years after Meeran Sahib passed away. It is believed that a carpenter who was cured of his disease by the miracle of Mian Sahib, presented him a pair of sandals made from finest wood. The same was used by Mian Sahib and it is said to be kept in a Golden Box next to the tomb. Kanduri festival is a 14-day event that is celebrated as the annual urs (anniversary). The festival is celebrated in commemoration of the saint's death anniversary and pilgrims from various religions participate in the festival. The festival is also seen as a sacred solidarity of mixed faith of Hindus and Muslims. There are three other prominent mosques; one near Nagai Pudhur Road, one near the new bus stand, and another at Moolakadai Street. A mosque located in the

Dargah complex where people come and pray. Friday Prayer or Juma Prayer attracts thousands of muslims for the noon prayer.

Mian sahib was born in Manikpur of Ayodyapuri and at the age of 5 he was qualified as Hafiz al Quran. He was a great scholar in Arabic and Persian. He went to Gwalior at the age of 18, to be the disciple of Syed Mohammed Houdu Sathari, a Preacher and Social Reformer. Mian Sahib took over the service and followed the foot steps of his Teacher and taught many youngsters about Islam and took them to the Ajmer Dargah and then to Mecca and Medina and performed Hajj. On his return, he began his Islamic Tabligh and he reached Kayalpattinam of the then Thanjavur Kingdom via Ponnali Harbour of Malabar Coast. King Achuthappa Nayakar of Thanjavur, had donated 5 acres of land on which the Dargah Shrine is located, as a gesture for curing the disease the King was suffering from.

Vanjur Shrine is located 2 Kms from the Dargah where Mian Sahib meditated for nearly 40 days in an underground cave. One Km from the main campus is the Silladi Shrine over looking Bay of Bengal. Thousands of Pilgrims throng this Dargah every day with the belief that Mian Sahib still blesses and cures all ailments including the Mental illness.

Madurai Temples

The Meenakshi Temple: It is an elegant twin temple of Sundareswarar and Meenakshi and the life of Madurai City revolves around this temple. The construction process of the temple began 2,000 years ago. Contributions from different rulers and special contribution from Thirumalai Naicker, made this complex to extend by leaps and bounds over an area of 65,000 sq.m and people rightly call this temple complex as a City of its own. Four nine tier Gopurams, one seven tier Chittirai gopuram, five numbers of five tier Gopurams, two three tier Gopurams and Two Golden Gopurams are the majestic towers of the temple. Because Golden Lotus for Indira's Puja blossomed in the tank inside the temple, it is called as Golden Lotus Tank (*Pon Thamarai Kulam*). The Hall of Thousand Pillar of the Thirumalai Naicker period is called as *Ayiram Kaal Mandapam* in Tamil. The architectural excellence of this hall is that the pillars viewed from any angle will be on a straight line. The musical pillars carved out of stone decorate the corridors of the outer courts.

Koodal Alagar: This is a temple in the heart of the City, dedicated to Lord Vishnu and one of the 108 Divya Desams. Koodal is another name for Madurai and Azhaghar means the beautiful, hence he is called Koodal Azhagar. Koodal Azhagar is in three postures: in Sitting posture as Koodal Azhagar, in standing posture as Sri Surya Narayanan, and Sri Ranganatha in Reclining posture (Lying down) are in three separate Sanctum Sanctorums one above the other. Convenient steps have been provided to

reach all the floors. The shadows of Ashtanga Vimanam (tower) do not fall on the ground. Lord Azhagar is taken on procession for a dip in the Vaigai River on the Chitra Pournami Day (Full Moon Day – Apr-May) is the most colourful festival that brings the entire Madurai Town to stand still. A 10 day float Festival is celebrated in the month of Masi [Feb-Mar] on the Maasi Magam [star] day.

Mariamman Theppakulam : It is also called as Vandiyur Mariamman Teppakulam just 2 kms from Meenakshi Temple in the Town. Well laid out Underground water Channels connect this Vandiyur Mariamman Teppakulam. It has 12 step Ghats on all four sides of the 16 acre Teppakulam measuring almost 300 meters by 300 meters in size. It is said that, this pit was dug to fetch sand to build Thirumalai Nayakar Palace. The pit was later converted with brick work as a Holy tank and Thirumalai Nayakar built the Vandiyur Mariamman Temple too on the northern side of the tank. In the middle of the tank there is a Mandapam called Maiya Mandapam (Center Mandapam) with a small Vinayagar Temple and a Garden. The Float Festival at Mariamman Teppkulam, one of the most colourful temple festivals, annually held in the month of Thai (Jan-Feb) to mark the birth anniversary of King Thirumalai Nayak. Goddess Meenakshi and Lord Sundareswarar are seated on an illuminated float (Theppam) colorfully decorated with flowers and the Theppam moves around the tank with the traditional musical treat in the background, watched by thousands of devotees.

Thiruparangundram: It is 8 kms from Madurai Junction. Cave shrines are calculated as 8th century creation of the Pandiyans and the temple of the later Nayaks. One of the Six Special Abodes of Lord Murugan dedicated to Lord Subramaniya is located here. The Sanctum

Sanctorum is carved out of a single rock and the temple is believed to be in existence for many centuries. The walls and the pillars are carved with sculptures that still fascinate the visitors.

Azhagar Koil: This Temple dedicated to Lord Vishnu called as Azhagar Kovil is located here, just 18 kms from Madurai Town. Ruins of an ancient fortified town can be seen around this temple even today. Temple underwent renovations and additions during the timeline of its existence. It is said that Yudishtra and Arjuna visited this temple during Mahabaratha period. *Koorathazhwar*, a disciple of Vaishnavite saint Ramanuja regained his lost vision here. The temple has the shrine of 2,000 year Sudharsana-Chakra worshipped by thousands of devotees.

kandapuranam, *Thirumurugatrupadai* of Poet *Nakkeerar* and *Arunagiri Nathar's Thirupugazh* revere this holy shrine.

Solai Malai Temple (Pazhamuthir Cholai): This temple is on the hillock reachable by a 3 km trekking on the Azhagar Malai from Azhagar Temple. This is the only one among Murugan's **Aru Padai Veedu** temples, where He graces the devotees with His consorts Valli and Deivanai. The wedding festival is celebrated along with **Kanda** Sashti festival. **Pazhamudhir Cholai** is a temple located about 16 kilometres north of Madurai atop a hillock covered with dense forests. One of the six important abodes (*Arupadai Veedu*) and close to the famous Azhagar Kovil (*Lord Vishnu*). Divine Poet *Avvaiyar*, while relaxing under the Naval Tree, encountered Lord Murugan in the form of Shepherd Boy on that tree, who played a prank with her to make her realize that Materialism should be removed from the mind to visualize the truth and seek God. It is also said that the actual temple was *Azhagar kovil* relocated as *Pazhamuthir Cholai* by the then ruler of Madurai – Thirumalai Naicker of the Nayaks dynasty.

Courtesy: ***Tamil Nadu Tourism Department***